



# UNITED STATES PATENT AND TRADEMARK OFFICE

②

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,786	07/31/2003	Noriaki Kitahara	241142US2S	3731

22850 7590 09/07/2006

C. IRVIN MCCLELLAND  
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

PIERRE LOUIS, ANDRE

ART UNIT	PAPER NUMBER
----------	--------------

2123

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/630,786

Applicant(s)

KITAHARA, NORIAKI

Examiner

Andre Pierre-Louis

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/13/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. The amendment filed on 06/15/2006 has been received and fully considered.
2. Claim 1 is cancelled; and now claims 2-7 are presented for examination.
3. Regarding the objection to the drawings, the examiner withdraws the objection in view of the amendment.
4. As per the claims' objection, the examiner withdraws the objection in view of the amendment.

**Response to Arguments**

5. Applicant's arguments filed 06/15/2006 have been fully considered but they are not persuasive.

5.1 Applicant argues that Wasynczuk et al. does not teach the display control unit, the examiner respectfully disagrees and points to *fig. 1-3 (32,35,37), pg. 3-4 (0034-0039)*, in addition to the already cited *fig., col., and lines* of the prior art. The applicant is further directed to the combined references cited figures along with their description.

5.2 Applicant argues that Wasynczuk et al. does not teach that the simulation is realized under RTI and the terms HLA and federates, the examiner respectfully disagrees and asserts that the HLA is used to connect different simulation system such as Wasynczuk et al. *fig. 6*, which includes the simulation program and that the federates are simply simulation object connected to RTI according to applicant's disclosures (see Wasynczuk et al. *fig. 1-3, and 6* along with their description). The applicant is further directed to the combined references cited figures along with their description.

Art Unit: 2123

5.3 Applicant argues that Reed et al. is directed to an electric power distribution system not a simulation, however, applicant's specific claims rejected under Reed et al. require generating electric power and supplying said electric power to end user (receivers) (see Reed et al. cited fig., col., and lines), and that Reed et al. does a teach simulation system (see Reed fig.2, col.1 lines 18-20 and col.5 line 38-54). However, the examiner relies on the combination of Wasynczuk et al. and Reed et al. for support of the rejection of claims 6 and 7. The applicant is further directed to the combined references cited figures along with their description.

5.4 While the applicant believes the independent claim along with its dependencies should be found allowable, the examiner respectfully disagrees and asserts that the combined references cited teach the entire claimed invention. Found the applicant's arguments non-persuasive, the examiner maintains the rejection of the independent claim along with its dependencies.

**Claim Rejections - 35 USC § 102**

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.0 Claims 2-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Wasynczuk et al. (USPG\_PUB No. 2002/0052725).

6.1 In considering the independent claim 2, Wasynczuk et al. teaches the functional equivalence of a distributed simulation system comprising a plurality of computers each including a display unit, the computers being connected to one another via a network and loaded with event-driven application programs, respectively, and the programs each executing simulation by use of a common facility assuring an information transfer between a plurality of objects existing in a distributed environment (*fig.1-6, pg.2-4 (0019-0043)*), the distributed simulation system comprising: an interface unit configured to interface with respect to a user by receiving an operation corresponding to the user's will (*fig.2-3, pg.1 (0008), pg.2-4 (0019-0043)*; see also *abstract*); and a notifying unit configured to notify the application programs of the operation received via the interface unit as an event (*fig.7A-B, pg.5-7 (0050-0073)*); a display control unit configured to display on the display unit a symbol acting as an interface for receiving an operation corresponding to the user's will, wherein the interface unit accepts the user's operation making use of the symbol displayed on the display unit (*fig.1-6, pg.5-7 (0050-0073)*).

6.3 With regards to claim 3, Wasynczuk et al. teaches that the display control unit reflects the result of the notifying of the event to the application programs in the contents displayed on the display units of said plurality of computers (*fig.7A-B, pg.5-7 (0050-0073)*).

6.4 Regarding claim 4, Wasynczuk et al. teaches that the simulation is realized under RTI (Run-time Infrastructure) for executing each service determined in HLA (High Level Architecture) interface specifications (*fig.1-6, pg.2-7 (0019-0073)*).

6.5 As per claim 5, Wasynczuk et al. teaches that the simulation is realized as a federation which includes, as federates, a plurality of nodes and a plurality of links connecting these nodes to form a network (*fig.1-6, pg.2-7 (0019-0073)*).

**Claim Rejections - 35 USC § 103**

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7.0 Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wasynczuk et al., as applied to claims 1-5 above, in view of Reed et al. (U.S. Patent No. 5,793,593).

7.1 Regarding claim 6, Wasynczuk et al. teaches most of the instant invention; however, he does not expressly teach that said plurality of nodes include power stations generating electric power and receivers who receive the electric power, said plurality of

Art Unit: 2123

links are power lines for supplying the electric power from the power station to the receiver, and the federation is a simulation which simulates a route for supplying electric power from the power stations to the receivers via the power line. *Reed et al.*

substantially teaches said plurality of nodes include power stations generating electric power and receivers who receive the electric power, said plurality of links are power lines for supplying the electric power from the power station to the receiver, and the federation is a simulation which simulates a route for supplying electric power from the power stations to the receivers via the power line (*fig. 1-2, col. 1 line 9-col. 4 line 62; also see col. 5 line 31-col. 10 line 42*). It would have been obvious to one ordinary skilled in the art at the time of the applicant's invention to combine the teaching of Wasynczuk et al. with Reed et al. for the purpose of representing the distributed simulation system as a power distribution network because Reed et al. further teaches the advantages of minimizing magnetic fields, and the ease of detecting high-z faults (col. 3 lines 1-11).

7.2 As per claim 7, the combined teachings of Wasynczuk et al. and Reed et al. substantially teach the elements constituting the power stations as the federates (see *Reed et al. fig. 1-2, col. 5 line 9-col. 10 line 62; also see Wasynczuk et al. fig. 1-6, pg. 2-7 (0019-0073)*).

### **Conclusion**

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8.1 Feinberg et al. (U.S. Patent No. 5,910,903) teaches a method and apparatus for verifying, analyzing, and optimizing a distributed simulation.

8.2 Stylinski et al. (USPG\_PUB No. 2002/0072414) teaches a pilot internet practice system and methods.

8.3 Jacobus (USPG\_PUB No. 2001/0052008) teaches a distributed computing environment.

8.4 Zhao (USPG\_PUB No. 2004/0034683) teaches a differentiated transport services for enabling real-time distributed interactive virtual systems.

8.5 Mellander (USPG\_PUB No. 2003/0135400) teaches a geographically or temporally distributed simulation system.

8.6 McCarty et al. (IEEE 1994) teaches a virtual cockpit for a distributed interactive simulation.

8.7 Song et al. (IEEE 1994) teaches a distributed simulation system for team decision-making.

8.8 Righter et al. (IEEE 1989) teaches a distributed simulation of discrete event systems.

9. Claims 2-7 are rejected and this action is non-final. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



Art Unit: 2123

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Pierre-Louis whose telephone number is 571-272-8636. The examiner can normally be reached on Mon-Fri, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 31, 2006

APL

  
PAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
9/5/06